

Abstract

Title: Relationship between the maximum isokinetic strength and one repetition maximum leg press in soccer players U15- U17.

Objectives: Determine whether it exist dependence between maximum strength leg press and isokinetics of the lower limbs of football players.

Methods: In my work I used methods of measurement and comparison. The measurements were made on the leg press and the Cybex dynamometer. On the leg press, the maximum force was examined and the Cybex dynamometer measured flexing and extension of knee joint at different speeds. Comparison of results was done in Excel using Person's correlation coefficient.

Results: My first hypothesis that leg-press results will correlate with Cybex results has been confirmed at higher speeds. This fact was confirmed in other studies with similar research. The second hypothesis was based on the relationship of the h / q ratio and its correlation with the results achieved on the Cybex dynamometer. This hypothesis was not confirmed and the values achieved were very low.

Key words: Strength capabilities, leg-press, Cybex, repetition maximum